SOKKIA™

TRANSIT FIELD BOOK

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815200



2003

INDEX

Florida Trip.

OKEFENOKEE SWAMP 4/12
SMITHSONIAN 4/14
SMITHSONIAN 5/12-15/03

4/8/03

w/ Steve Manchester.

References:

Ferns & Cycads of Geiseltal
Prob. W. Barthold. 1930
2 vols.
Has Rutfordia in it.

Eostangeria

Margaret Collinson also has a review of Cenozoic ferns.
out

4/10/2003

74
58
1 6

Photography

#17 Beringiaphyllum cupanoides
det SAM. UF 18969-34590
Horse Cr. MONT.

#18 Camptotheca sp. fruit
18969-34498, 34498'
note persistant perianth
Horse Cr. MT.
F.V.

#19 Camptotheca acuminata
UF Modern Coll. 0556
11/27/1986

#20 Davidia involucrata Baill
UF 139045

#21 Davidia involucrata Baill
var. vilmoreana

#22 Camptotheca serrata
UF 18969-34480
Horse Cr. MT F.V.

#23 Dividia antiqua (Hinby) Mauch.
UF 18126 - 13270

#24 Camptotheca serrata
UF 18969 - 34479
Horse Creek MT. F.V.

#25, #26 } Camptotheca serrata
UF 18969 - 34583
w dots.

#27 C. serrata
UF 18750 -
Goodman Cr. BUTTES., N.D.
G.V Fm.

28 C. serrata fruits (w/ Inflorescence)
UF 18969 - 34516
Horse Cr. MT. F.V.

29 C. serrata
UF 18969 - 34513
Horse Cr. MT. FV.

30 C. serrata
UF 18969 - 34487
Horse Cr. MT. FV.

Photographs at U. Florida w/
Steve Manchester

31 Camptotheca serrata
UF 18969-9448'
Horse Cr. MT. F.U.

32 C. serrata
UF 15722-29200

33 C. serrata
UF 18969-34514
Horse Cr. F.U.

34. C. serrata
UF-18969-34484
Horse Cr. F.U.

35 C. serrata
UF 15886-25265'
Black Buttes, Wy

36 C. serrata inflorescence w/
fruits
UF 15778-25167'
Big Flat Draw, Wy.

37 } A Trochodendroid
38 } VF 18912-35090 Chlor. Teeth

VF-18912-35090

Screndipity Summit, Mont
Pseudo-DAvidia but w/ dots.
Ethereal oil? cells.

39 } C. serrata
40 } VF 18912-35082

Screndipity Summit
- Habit & 39
Detail 40

41 } C. serrata
42 } VF 18912-34994

Screndipity Summit
Habit (41)
& Detail (42)

43 C. serrata?
VF. 18912-34995
Screndipity Summit
a chlorranthoid tooth on this

4/11/2013

AT UNIV. OF FLORIDA

FLMNH MUSEUM. W/

STEVE MANCHESTER

~~D.T.~~ Survey

#	Taxon			X Abs ✓ Present + Size if ✓
E604	Camptotheca acuminata			✓ 0.05
E13	"	"	1F1,3	✓ 0.05
F732071	Davidia vilmoriniana			X
5278	Nyssa sylvatica			X
F-1870135	" Ogeche			X
5169	Nyssa sylvatica			X
MO 1946743	Afrocrania volkensii (Cornaceae)			X
MO 1279704	Cornus alternifolia			✓ *
	Very fine dots @ ≤.025mm			
mo.1205447	Cornus asperifolia			X
MO 2181191	" Circinata			X
MO 2040648	" disciflora			X
8193	" florida			✓ 0.025
550	" "			✓ 0.025
5194	" "			✓ 0.025
MO 1991575	" "			✓ 0.025

#'s are UF Paleobotany living coll. #'s

DAUCUS, NVSS have a
foamy mesophyll texture -

LVS, examined at 12 X 25 X
under a WILD dissecting scope
on a light table.

40 ticks / mm 0,025 at 12 X

4/11/2003 Dot Table Contd

MO 1991515	(Cont) margin w SINUS NOTCHES.	
MO 1260443	Cornus hongkongensis	X
2356	Cornus mas	√?
2353	Cornus officinalis	X
MO 949209	" stolonifera	√
MO 2022234	C. kousa	√
MAD 27557	C. valkensii	X
MO 1616299	Corokia buddleioides	X
MO 1915784	Cyrtanthera carassmanii	X
MO 1609969	Curtisia faginea	X
MO 1257925	Dorstenia flavida	√
2096	Garrya elliptica palida	?
1754	G. elliptica	X
MO 1276030	Griselinia Veatchii	X
MO 1622744	G. jodinifolia	X
MO 928645	G. scandens	X
MO 1420520	G. ruscifolia	X
MO 52605	Helwingia himalayica	X
MO 1991403	H. japonica	X
1762	H. japonica	X
MO 1591881	Kalmia latifolia	X

Comment on TAXA 70 (?).

Very Small 0.015 mm & widely
Scattered. Lum. w/ Styrofoam
Texture

Sparce 0.025 mm
Large ~ 0.05 mm. Crenulate margin

Opaque to IT.
Serrate w/ rounded sinuses
Scattered. 0.03 - 0.05 mm
Heavy Lumenose Opaque
Fordyce Grinnell #323

Minute lacunae - Styrofoam Texture

4/11/2003 IDT Table p. 3.

F567672	Mastixia cavdifolia		✓
MO 935369	M.	"	?
F 573716	M. kanarensis		?
1757	M. pentandra		X
Pl. Barnes 127	M	"	X
F 435672	M. phillippinensis		✓
~~MO 2297148~~	~~"~~	~~"~~	
MO 801789	"	"	X
MO 34219	"	"	X
MO 2297148	"	Tetrandra	—
MO 127557	Torricellia angulata		X

Styrofoam texture A.O.E Elmer #1584
Styrofoam texture w rare dots to 0.05 mm
S. texture w very small 0.015 dots
H.N. Whitford #208
Styrofoam texture no dots
Pitchy dots, angular and of irreg.
size. Some to 0.08 mm
mass ~ 0.05 mm

Hyphodramous ? spp. nc.
Styrofoam texture, No x15.

4/12/03 Bivens Arm Lake
E Side
200 Yds N. from Bivens
Not Cowld.
CPS.

Itea virginica
Shrub 4' to 6' tall
SW edge of Lake in
Solidasta sp.
in ATV trail + bank
Acer Rubr.
Sambucus
Myrica
Salix
Switch Grass

RJH 6001

Px 2 & 3 of Itea
w Switch Grass in
foreground

4/12/03

Okefenokee Swamp

Pk- Grove at River Dr.

Gaddoni P. lasianthus
Bald Cypress

Saw tax. dist.
Long leaf pine
Magnolia virg.
Reiser pubescens
Nyssa sylvatica

Ilex vom.
Ilex
Leucothoe
Vaccinium Corymbosum
Pinckneya pubens
Smilax

Orontium aquat.
Symplocos tinctoria
Osmocten stns.
Spanish moss

1/12 IN NATURE TRAIL AT
PARK HEADQUARTERS

PX Gordonia Tree & BER.
on NATURE TRAIL AT S. FORK N.
SCRANTON [illegible]

JAN TAXODIUM
ALSO QUERCUS NIGRA

WH 6002
[illegible]
IN WOODS AT
[illegible]
[illegible]

4/14/03

AT NMNH (Paleobotany) w/ Scott wing.

Packed up the Eagle Collection. 4 Boxes & took Ian's Winthrop Coll.

Examined

USNM 7003 Alnus serrata Newberry - Has Teeth & glands & 3°s of Camptotheca

Px. 18-19

USNM 167485 Dryopteris serrata Brown 1962, p. 42, Pl. 8, fig. 17 Holotype.

Px 17 - Gymnogramma gardneri Lesq. 1878, p 581, Pl. H, f. 2.

Px 16 - Populus anomala. Holo. Ward. 1887, p. 23, Pl. 8, f. 5.

Px 15 Detail of 16 Pop. anomala

4/15/2003

At The Smithsonian Inst. -

Paleobotany Col.

5/12/03

AC The SI for Ind. leaf conference

Viburnum fimbule
Veed, 1887, USGS Bull 37, 21, 57, fig. 3.
USNM H050

5/13/03 ~ ST

Rx.s

Alnus serrulata Newberry

Newberry 1898, USNM 7003

5/14/03

Newberry, 1863, Bost. Jour
Mct. Hist v. 7
Specimens at SI

USNM	NAME
107226=6934	Aspidium Kinnerkyi fig. 4
1063	Aspidium Kenneryi Pl. 16, fig 5
6941	Populus glaberrima Pl. 20 fig. 4 Chuckanut Fm., N Bellingham
~~1210~~ 1069	Equisetum robustum Pl. 16, f. 1 Bellingham Bay [illegible] below Chuckanut 2
1054	Quercus coriacea Pl. p. 73 unfig Bellingham Bay
1061 (!)	Cinnamomum heerii unfig. Pt. Pouchetty, Orcas Is. K
1061 (!)	Cinnamomum heerii Pl. 25, figs 7 ?

9/20/

Pine Island Field Trip

(1) Gaylussacia baccata

3-4'

Pl. D&K

Carya

Pinus serotina

Pinus sp.

Vaccinium sp.

Liquidambar styraciflua

Quercus

Jim Rich
Jeff
Megan Dan
Teresa Jamie
Brian Susan
Mark
LC

C 4112007

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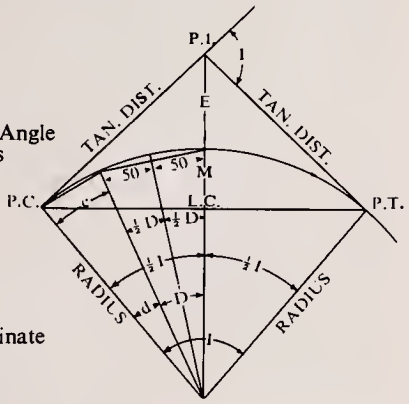
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CURVE FORMULAE

D = Degree of Curve
1° = 1-Degree of Curve
2° = 2-Degree of Curve
P.C. = Point of Curve
P.T. = Point of Tangent
P.I. = Point of Intersection
I = Intersection of Angle, Angle between Two Tangents
L = Length of Curve, from P.C. to P.T.
T = Tangent Distance
E = External Distance
R = Radius
L.C. = Length of Chord
M = Length of Middle Ordinate
c = Length of Sub-Chord
d = Angle of Sub-Chord



$$R = \frac{L.C.}{2 \sin \frac{1}{2} I} \quad T = R \tan \tfrac{1}{2} I = \frac{L.C.}{2 \cos \frac{1}{2} I}$$

$$\frac{L.C.}{2} = R \sin \frac{I}{2}, \quad D\,1° = R = 5730, \quad D\,2° = \frac{5730}{2}, \quad D = \frac{5730}{R}$$

$$M = R\,(1 - \cos \tfrac{1}{2} I), \quad = R - R \cos \frac{I}{2}$$

$$\frac{E + R}{R} = \sec \frac{I}{2}, \quad \frac{R - M}{R} = \cos \frac{I}{2}$$

$$c = 2\,R \sin \tfrac{1}{2} d, \quad d = \frac{c}{2R}$$

$$L.C. = 2\,R \sin \tfrac{1}{2} I, \quad E = R\,(\sec \tfrac{1}{2} I - 1), \quad = R \sec \frac{I}{2} - R$$

Minutes in Decimals of a Degree

1′	·0167	11′	·1833	21′	·3500	31′	·5167	41′	·6833	51′	·8500
2	·0333	12	·2000	22	·3667	32	·5333	42	·7000	52	·8667
3	·0500	13	·2167	23	·3833	33	·5500	43	·7167	53	·8833
4	·0667	14	·2333	24	·4000	34	·5667	44	·7333	54	·9000
5	·0833	15	·2500	25	·4167	35	·5833	45	·7500	55	·9167
6	·1000	16	·2667	26	·4333	36	·6000	46	·7667	56	·9333
7	·1167	17	·2833	27	·4500	37	·6167	47	·7833	57	·9500
8	·1333	18	·3000	28	·4667	38	·6333	48	·8000	58	·9667
9	·1500	19	·3167	29	·4833	39	·6500	49	·8167	59	·9833
10	·1667	20	·3333	30	·5000	40	·6667	50	·8333	60	1·0000

Inches in Decimals of a Foot

$\frac{1}{16}$	$\frac{3}{32}$	$\frac{1}{8}$	$\frac{3}{16}$	$\frac{1}{4}$	$\frac{5}{16}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	$\frac{7}{8}$
·0052	·0078	·0104	·0156	·0208	·0260	·0313	·0417	·0521	·0625	·0729
1	2	3	4	5	6	7	8	9	10	11
·0833	·1667	·2500	·3333	·4167	·5000	·5833	·6667	·7500	·8333	·9167

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